

IN THE CLAIMS:

Please cancel claims 1-17 without prejudice or disclaimer, and add the following new claims 18-36.

18. (New) A communications network comprising
a plurality of transmitting stations and receiving stations for transmitting and receiving signals, the transmitting stations being adapted for transmitting a data signal as a series of data packets, wherein a data packet is scheduled to be transmitted by a transmitting station by use of an available transmission resource, and the receiving stations being adapted for transmitting a reservation indicator for reception by transmitting stations,

wherein the reservation indicator transmitted by a receiving station in response to a reception without unacceptable interference of a first data packet from a first transmitting station indicates to the first transmitting station that the receiving station has received the first data packet without unacceptable interference, and indicates to a second transmitting station intending to transmit a data packet and also hearing the reservation indicator that a data transmission resource has been reserved by the receiving station for reception of the next data packet of a data signal from the first transmitting station transmitting the data signal and that the data transmission resource is not allowed to be used by the second transmitting station for a transmission of a data packet by the second transmitting station, and

wherein not hearing the reservation indicator by the second transmitting station indicates to the second transmitting station that a data transmission resource has not been reserved and can be used by the second transmitting station for transmitting the data packet or indicates to the first transmitting station that the last data packet transmitted by the first transmitting station has not been received with acceptable interference from the first receiving station.

19. (New) A communications network as claimed in claim 18,

wherein each data packet is transmitted in a fixed data time slot of a plurality of data time slots within a time frame of a series of subsequent frames, wherein an indicator time slot is assigned to each data time slot of each frame, and

wherein a reservation indicator transmitted by the receiving station in an indicator time slot indicates, whether the associated data time slot has been reserved in a subsequent time frame for transmission of the next data packet by the transmitting station, the associated data time slot in the subsequent time frame representing the data transmission resource, and

wherein not hearing a reservation indicator in an indicator time slot indicates to the second transmitting station that the associated data time slot in the subsequent time frame can be used by the second transmitting station for transmitting a data packet.

20. (New) A communications network as claimed in claim 18,

wherein the data packets are transmitted in a fixed data sub-carrier,

wherein an indicator sub-carrier is assigned to the data sub-carrier, and

wherein a reservation indicator transmitted by the receiving station in an indicator sub-carrier indicates, whether the associated data sub-carrier is reserved for transmission of the next data packet by the transmitting station, the associated data sub-carrier representing the data transmission resource,

wherein not hearing a reservation indicator in an indicator sub-carrier indicates to the second transmitting station that the associated data sub-carrier can be used by the second transmitting station for transmitting a data packet.

21. (New) A communications network as claimed in claim 18,

wherein a data transmission resource for the transmission of data packets of a signal is selected based on the reservation indicator.

22. (New) A communications network as claimed in claim 18, wherein the first transmitting station transmits a continue indicator along with a data packet indicating, whether at least one further data packet shall be transmitted to the receiving station in the same data transmission resource.

23. (New) A communications network as claimed in claim 22, wherein the receiving station, to which the first transmitting station transmits a data packet, transmits the reservation indicator indicating that the data transmission resource has been reserved for reception of at least one further data packet when the continue indicator indicates that at least one further data packet shall be transmitted in the same data transmission resource by the first transmission station.

24. (New) A communications network as claimed in claim 18, wherein the data transmission resource is a data time slot, a data sub-carrier, a data carrier and/or a data code.

25. (New) A communications network as claimed in claim 18, wherein the network is a cellular communications network, an ad-hoc communications network or a hybrid cellular/ad-hoc communications network.

26. (New) A communications network as claimed in claim 18, wherein the transmitting stations are adapted for checking, whether a received reservation indicator is a valid reservation indicator.

27. (New) A communications network as claimed in claim 26, wherein the transmitting stations are adapted for checking the validity of a received reservation indicator by determining an actual path gain for the received reservation indicator and by comparing the actual path gain to an expected path gain.

28. (New) A communications network as claimed in claim 27, wherein the transmitting stations are adapted for judging a received reservation indicator as invalid when the actual path gain is substantially different from the expected path gain.

29. (New) A communications network as claimed in claim 28, wherein the transmitting stations are adapted for judging a received reservation indicator as invalid, when a percentage error between the actual path gain and the expected path gain is larger than a predetermined threshold of 5%.

30. (New) A method of communicating in a communications network comprising a plurality of transmitting stations and receiving stations for transmitting and receiving signals comprising the steps of:

transmitting a data packet of a data signal having a series of data packets by a first transmitting station using an available transmission resource,

transmitting a reservation indicator by a receiving station, in response to a reception without unacceptable interference of a first data packet from the first transmitting station, the reservation indicator indicating to the first transmitting station that the receiving station has received the first data packet without unacceptable interference, and indicating to a second transmitting station intending to transmit a data packet and also hearing the reservation indicator that a data transmission resource has been reserved by the receiving

station for reception of the next data packet of a data signal from the first transmitting station transmitting the data signal;

transmitting the next data packet by the first transmitting station using the data transmission resource, when the first transmitting station has heard the reservation indicator; and

transmitting a data packet by the second transmitting station using the data transmission resource, when the first transmitting station has not heard the reservation indicator.

31. (New) A receiving station for use in a communications network comprising a plurality of transmitting stations and receiving stations for transmitting and receiving signals, comprising:

a receiver for receiving a data packet of a series of data packets of a data signal from a first transmitting station, via a transmission resource, and

a transmitter for transmitting a reservation indicator for reception by the first transmitting station, in response to a reception without unacceptable interference of a first data packet from the first transmitting station by the receiving means, the reservation indicator indicating that a data transmission resource has been reserved by the receiving station for reception of the next data packet of the data signal from the first transmitting station transmitting the data signal;

wherein the receiving station is adapted to not transmit the reservation indicator, when the last data packet transmitted by the first transmitting station has not been received with acceptable interference by the receiving means.

32. (New) A transmitting station for use in a communications network comprising a plurality of transmitting stations and receiving stations for transmitting and receiving signals, comprising:

a transmitter for transmitting a data packet of a series of data packets of a data signal to a receiving station using a transmission resource,

a receiver for receiving a reservation indicator transmitted from the receiving station, the reservation indicator indicating to the first transmitting station that the receiving station has received the first data packet without unacceptable interference,

wherein the transmitting means is adapted to transmit a next data packet of the series of data packets using the available transmission resource, when the reservation indicator is received by the receiving means, and wherein the transmitting means is adapted to not transmit a next data packet of the series of data packets using the transmission resource, when the next data packet is not received by the receiving means.

33. (New) A transmitting station for use in a communications network comprising a plurality of transmitting stations and receiving stations for transmitting and receiving signals, comprising:

a transmitter for intending to transmit a data packet of a series of data packets of a data signal to a receiving station using a transmission resource,

a receiver means for hearing, whether a reservation indicator assigned to the transmission resource is received, the reservation indicator indicating to the transmitting station that a receiving station has received a data packet without unacceptable interference from a different transmitting station, so that the data transmission resource is not allowed to be used by the transmitting station for a transmission of a data packet,

wherein the transmitting means is adapted to use the transmission resource, when the reservation indicator is not heard by the receiving means.

34. (New) A method of operating a receiving station, comprising:

receiving a data packet of a series of data packets of a data signal from a first transmitting station, via a transmission resource;

transmitting a reservation indicator for reception by the first transmitting station, in response to a reception without unacceptable interference of a first data packet from the first transmitting station, the reservation indicator indicating that a data transmission resource has been reserved by the receiving station for reception of the next data packet of the data signal from the first transmitting station transmitting the data signal,

wherein the reservation indicator is not transmitted, when the last data packet transmitted by the first transmitting station has not been received with acceptable interference in the step of receiving.

35. (New) A method of operating a transmitting station, comprising:

transmitting a data packet of a series of data packets of a data signal to a receiving station using a transmission resource,

receiving a reservation indicator transmitted from the receiving station, the reservation indicator indicating to the first transmitting station that the receiving station has received the first data packet without unacceptable interference;

transmitting a next data packet of the series of data packets using the available transmission resource, when the reservation indicator is received in the step of receiving, and

wherein a next data packet of the series of data packets is not transmitted using the transmission resource, when the next data packet is not received in the step of receiving.

36. (New) A method of operating a transmitting station, comprising:

intending to transmit a data packet of a series of data packets of a data signal to a receiving station using a transmission resource,

hearing, whether a reservation indicator assigned to the transmission resource is received, the reservation indicator indicating to the transmitting station that a receiving station has received a data packet without unacceptable interference from a different transmitting station, wherein the data transmission resource is not allowed to be used by the transmitting station for a transmission of a data packet, when the reservation indicator is heard, and

using the transmission resource, when the reservation indicator is not heard in the step of hearing.